

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the Application.

Listing of Claims

1–44. (Canceled)

45. (Currently Amended) A DSP-3 substrate trapping mutant polypeptide comprising an amino acid sequence that differs from the amino acid sequence set forth in SEQ ID NO:2 in one or more amino acid deletions, additions, insertions or substitutions at no more than 25% of the residues in by a substitution at position 57 or position 88 of SEQ ID NO:2, such that the DSP-3 substrate trapping mutant polypeptide binds to a substrate with an affinity that is not substantially diminished relative to the affinity with which a DSP-3 polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2 binds to the substrate, and such that the ability of the DSP-3 substrate trapping mutant polypeptide to dephosphorylate a substrate is reduced relative to the ability of the DSP-3 polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2 to dephosphorylate the substrate.

46.-49. (Canceled).

50. (Currently Amended) A-The DSP-3 substrate trapping mutant polypeptide according to claim 45 that comprises an amino acid substitution at position 57 of SEQ ID NO:2.

51. (Original) The DSP-3 substrate trapping mutant polypeptide of claim 50 wherein the amino acid substitution at position 57 comprises an alanine residue.

52. (Currently Amended) A-The DSP-3 substrate trapping mutant polypeptide according to claim 45 that comprises an amino acid substitution at position 88 of SEQ ID NO:2.

53. (Original) The DSP-3 substrate trapping mutant polypeptide of claim 52 wherein the amino acid substitution at position 88 comprises a serine residue.

54. (Currently Amended) ~~A-~~The DSP-3 substrate trapping mutant polypeptide according to claim 45 that comprises an amino acid substitution at position 57 of SEQ ID NO:2 and an amino acid substitution at position 88 of SEQ ID NO:2.

55. (Original) The DSP-3 substrate trapping mutant polypeptide of claim 54 wherein the amino acid substitution at position 57 comprises an alanine residue and wherein the amino acid substitution at position 88 comprises a serine residue.